

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) Integrated circuit comprising a plurality of processing modules (M; I; S; T) and a network (N; RN) arranged for providing at least one connection between a first and at least one second module, wherein the at least one connection comprises a set of communication channels each having a set of connection properties, the connection properties of the different communication channels of said connection being adjustable independently, wherein said connection supports transactions comprising at least one of outgoing messages from the first module to the second module and/or return messages from the second module to the first module.

2. (Original) Integrated circuit according to claim 1, further comprising: at least one communication managing means (CM) for managing the communication between different modules; and at least one resource managing means (RM) for managing the resources of the network (N).

3. (Original) Integrated circuit according to claim 2, wherein said first module (M; I) is adapted to issue a request (REQ) for a connection with at least one of said second modules to said communication managing means (CM), said communication managing means (CM) is adapted to forward said request (REQ) for a connection with communication channels each having a specific set of connection properties to said resource managing means (RM), said resource managing means (RM) is adapted to determine whether the requested connection based on said communication channels with said specific connection properties are available, and to respond the availability of the requested connection to said communication managing means (CM), wherein a connection between the first and second module is established based on the available

properties of said communication channels of said connection.

4. (Previously Presented) Integrated circuit according to claim 2, wherein said communication managing means (CM) is adapted to reject establishing a connection based on the available connection properties when the available connection properties are not sufficient to perform the requested connection between said first and second module (M, I, S, T).

5. (Previously Presented) Integrated circuit according to claim 2, wherein said communication managing means (CM) is adapted to request a reset of the connection between said first and second module (M, I, S, T), when said modules have successfully performed their transactions.

6. (Previously Presented) Integrated circuit according to claim 2, further comprising: at least one network interface means (NI), associated to each of said modules, for managing the communication between said modules and said network (N).

7. (Currently Amended) Method for exchanging messages in an integrated circuit comprising a plurality of modules, the messages between the modules being exchanged over connections via a network, wherein said connections comprises a set of communication channels each having a set of connection properties, any communication channel being independently configurable, wherein said connection through the network supports transactions comprising at least one of outgoing messages from the first module to the second module and/or return messages from the second module to the first module.

8. (New) The Integrated circuit of claim 1, further comprising at least one of a switch and a router.

9. (New) The Integrated circuit of claim 1, further comprising a chip, wherein the processing modules and the network are disposed on said chip.

10. (New) The method of claim 7, wherein the network manages traffic utilizing at least one of a switch and a router.

11. (New) The method of claim 7, wherein the processing modules and the network are disposed on a chip.